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CENTRAL FAX CENTER

IN THE CLAIMS

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Serial No. 09/808,060
Page 2 of 7

1. (currently amended) A network relay apparatus comprising:
a routing information gathering unit for determining the maximum transmission unit of a transmission path along a route over which packets are to be transmitted;
a combining unit for assembling a combined packet by combining packets up to a length that does not exceed the maximum transmission unit of said transmission path; and
a routing processing unit for excluding a path along a shortest route to a same destination, comparing maximum transmission units of a remaining plurality of transmission paths to the same destination, and selecting a path having the largest maximum transmission unit as a path for said combined packet from among a-the remaining plurality of transmission paths to the same destination, wherein
~~— said routing processing unit selects a path having the largest maximum transmission unit as a path for said combined packet from among a plurality of transmission paths to the same destination by excluding the path along the shortest route.~~

2. (original) An apparatus according to claim 1, wherein said combined packet carries as a destination address the address of an endpoint of the route over which said packets are transmitted in combined form, said apparatus further comprising:

a disassembling unit for disassembling a received combined packet into individual packets if the destination address of said received combined packet matches the address of said apparatus.

3. – 4. (canceled)

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Serial No. 09/808,060
Page 3 of 7

5. (original) An apparatus according to claim 1, further comprising a combine allow/disallow determining unit for determining, based on a packet attribute, whether or not said combining unit should be made to combine packets.

6. (original) An apparatus according to claim 1, further comprising a reassembling unit for disassembling a received combined packet into individual packets and reassembling the same into a combined packet of a length not exceeding the maximum transmission unit of the currently selected path if the length of said received combined packet exceeds said maximum transmission unit.

7. (currently amended) A method of combining packets, comprising the steps of: determining the maximum transmission unit of a transmission path along a route over which packets are to be transmitted;

assembling a combined packet by combining packets up to a length that does not exceed the maximum transmission unit of said transmission path; and

excluding a path along a shortest route to a same destination;

comparing maximum transmission units of a remaining plurality of transmission paths to the same destination; and

selecting a path having the largest maximum transmission unit as a path for said combined packet from among the remaining plurality of transmission paths to the same destination, wherein—

Serial No. 09/808,060

Page 4 of 7

~~in said selecting step, a path having the largest maximum transmission unit is selected as a path for said combined packet from among a plurality of transmission paths to the same destination by excluding the path along the shortest route.~~

8. (original) A method according to claim 7, wherein said combined packet carries as a destination address the address of an endpoint of the route over which said packets are transmitted in combined form, said method further comprising the step of:

disassembling a received combined packet into individual packets if the destination address of said received combined packet matches the address of an apparatus that received said combined packet.

9. – 10. (canceled)

11. (original) A method according to claim 7, further comprising the step of determining, based on a packet attribute, whether to combine or not combine packets.

12. (original) A method according to claim 7, further comprising the step of disassembling a received combined packet into individual packets and reassembling the same into a combined packet of a length not exceeding the maximum transmission unit of the currently selected path if the length of said received combined packet exceeds said maximum transmission unit.